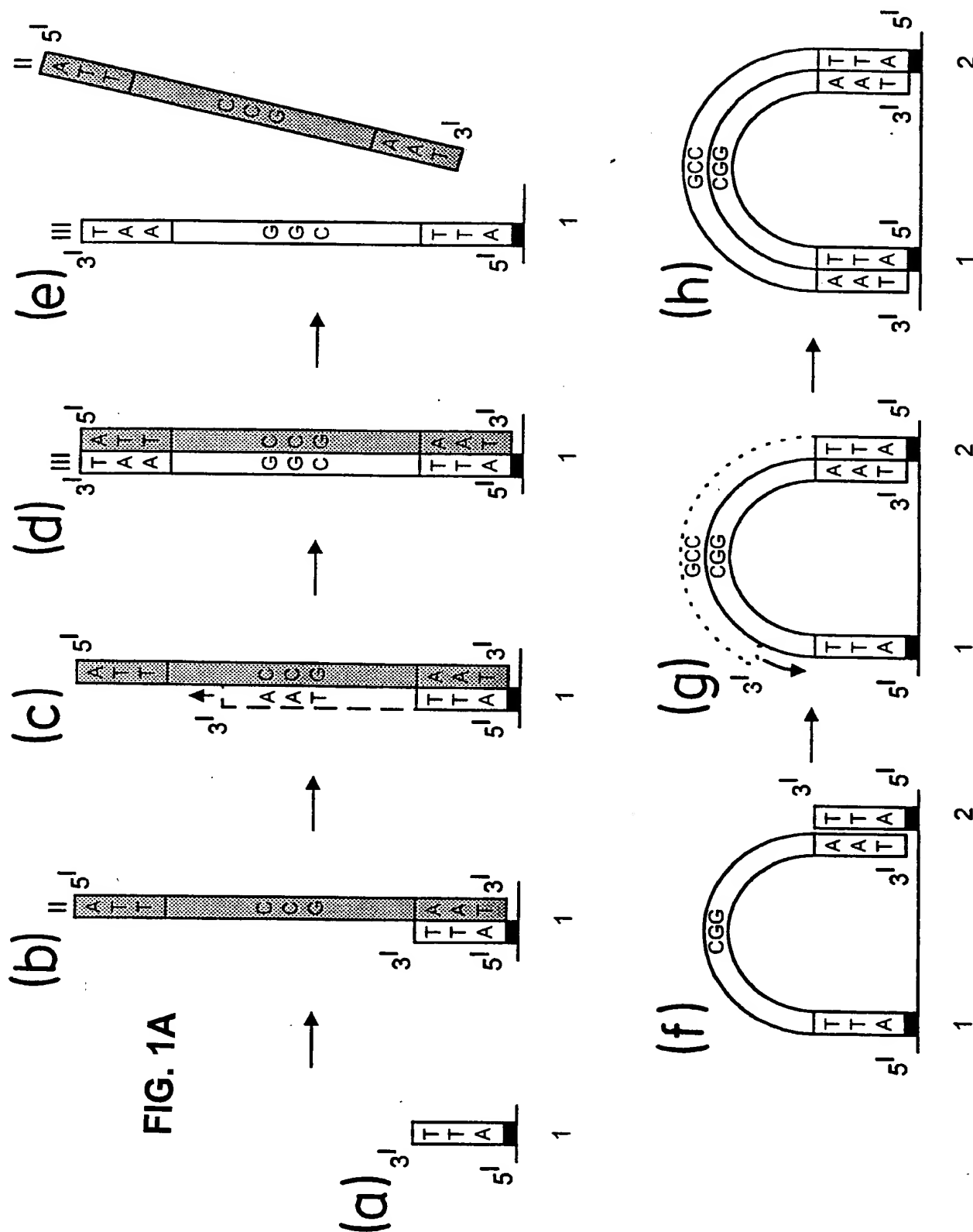
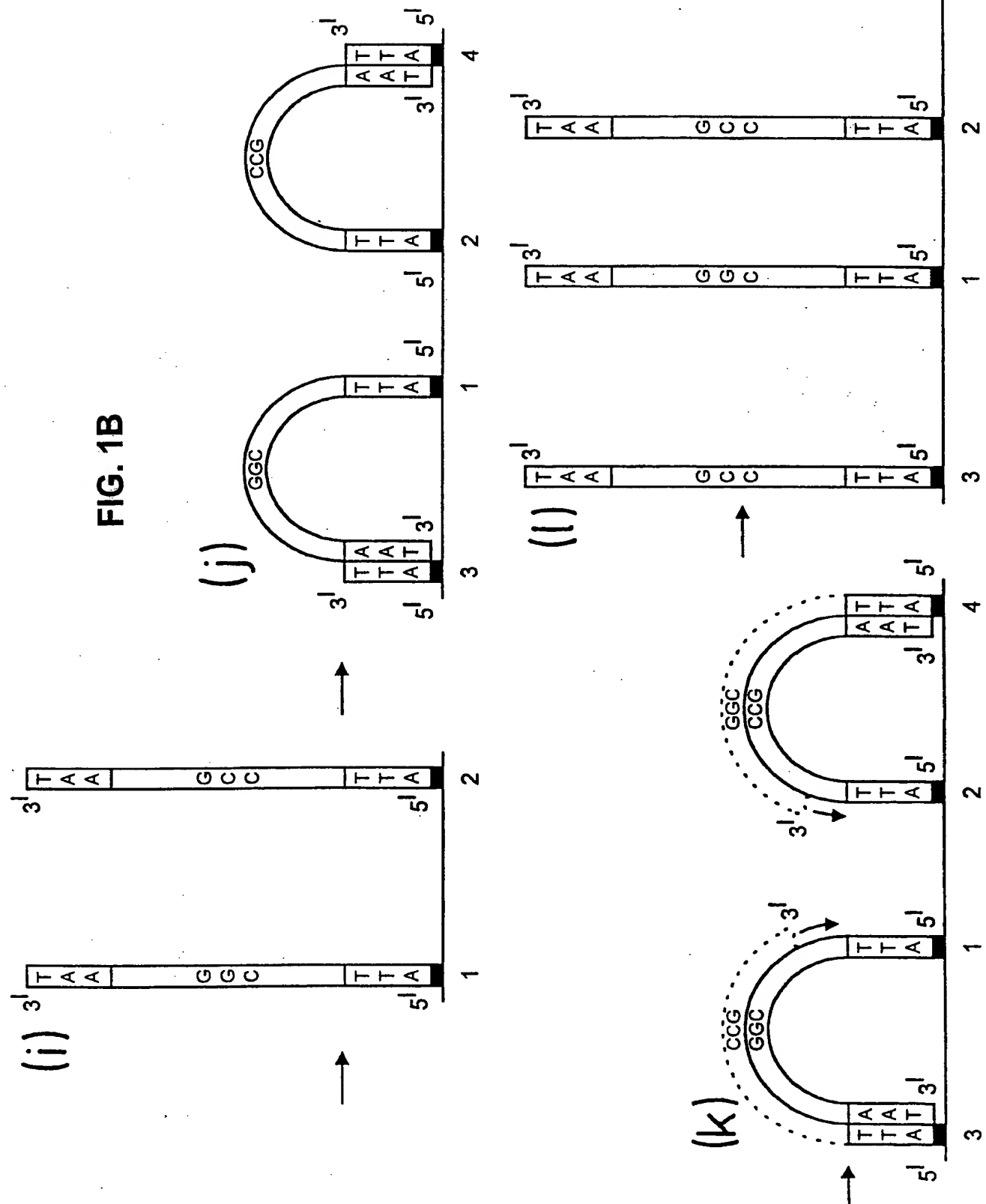


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FIG. 1B



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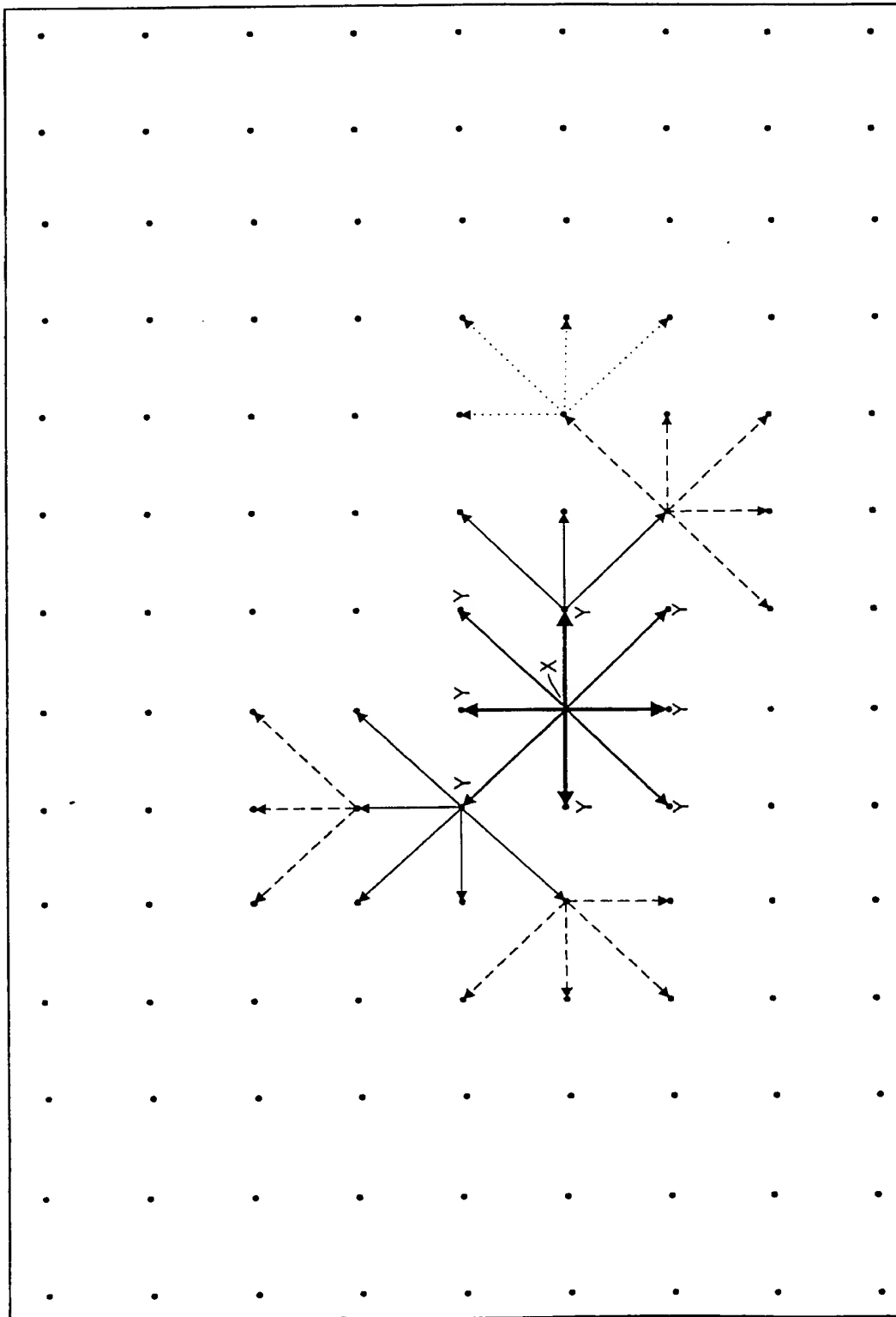
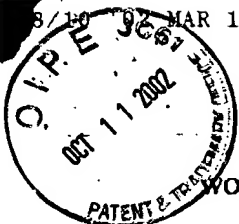


FIG. 2 SHOWS SCHEMATIC VIEW OF COLONY GROWTH



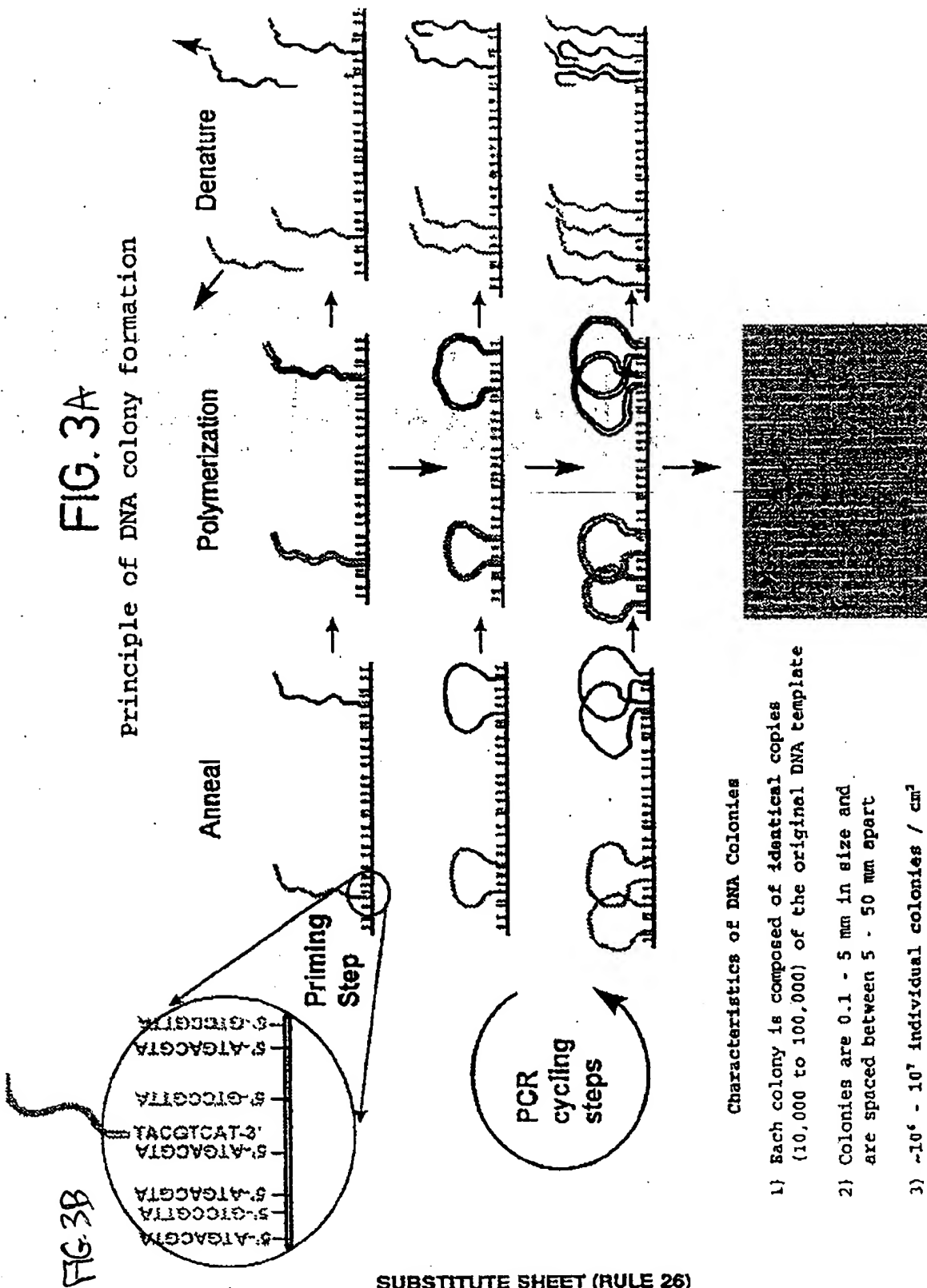
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FIG. 3A

Principle of DNA colony formation



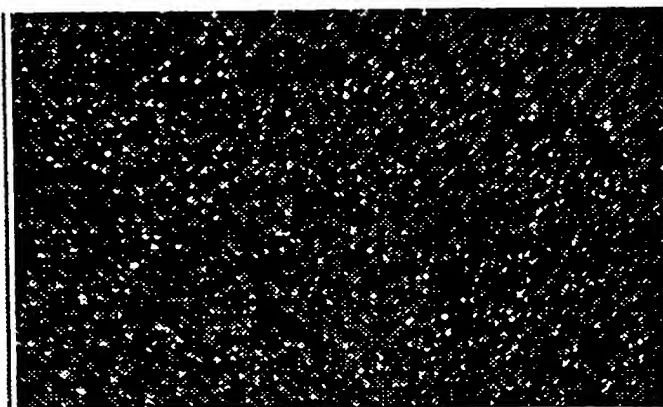
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**FIG. 4**

Colony generation on tubes functionalised with oligonucleotide p57 (control). Results of visualisation of fluorescent microspheres. Hybridisation with probe detects 0.10 fmol/tube.

**FIG. 5**

Colony generation on tubes functionalised with oligonucleotide p58. Results of visualisation of fluorescent microspheres. Hybridisation with probe detects 6.2 fmol/tube



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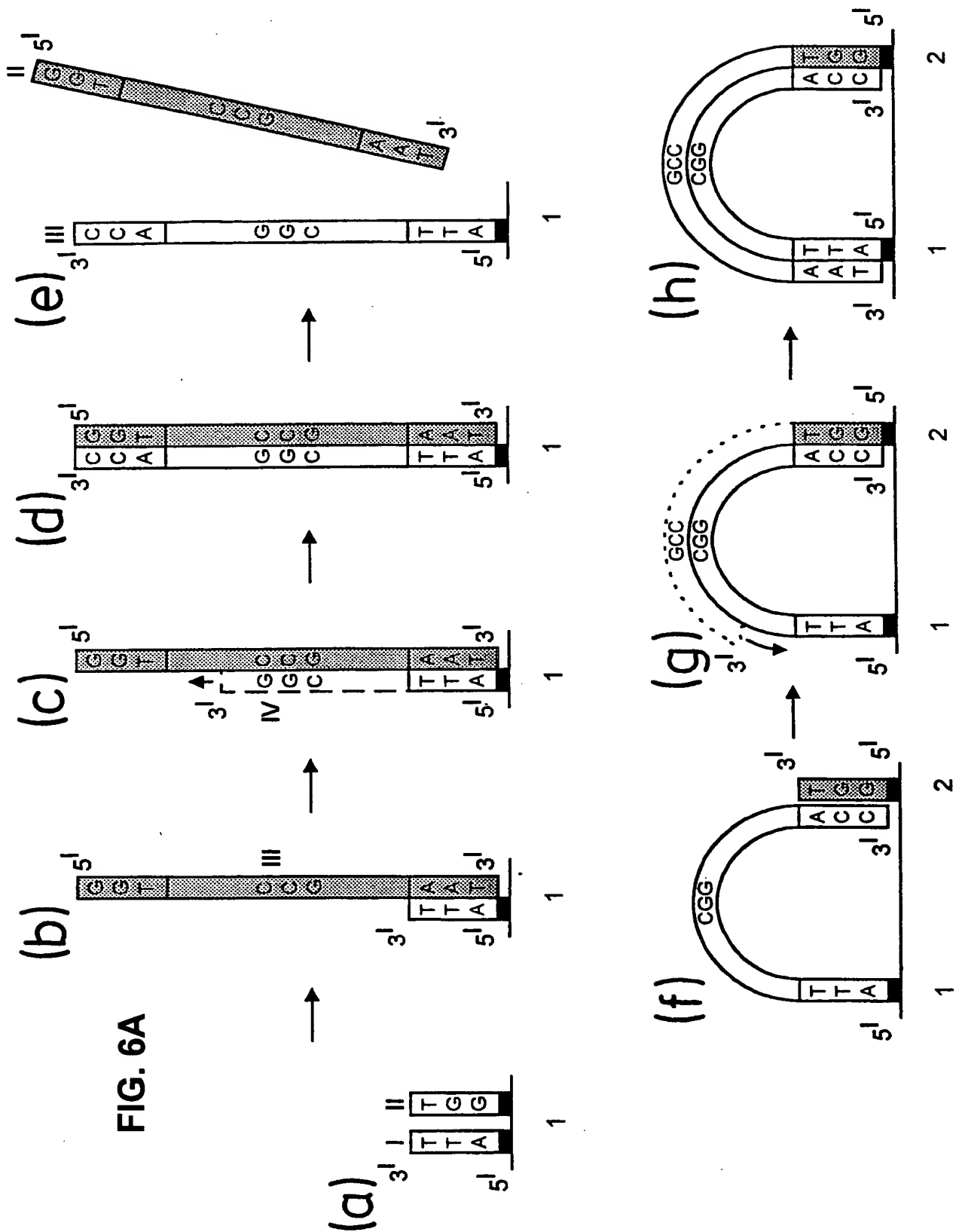
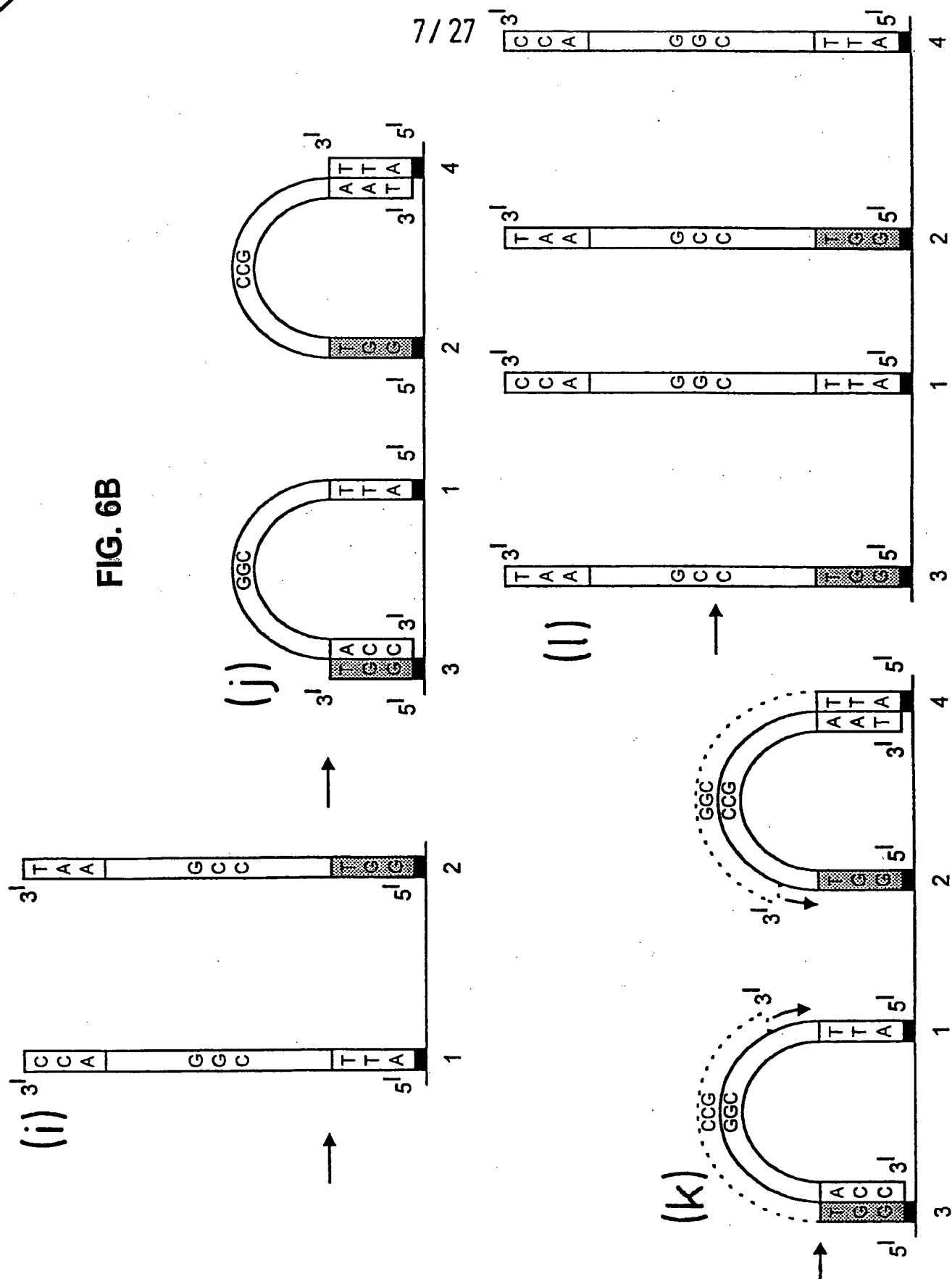


FIG. 6B



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**FIG. 7**

DNA amplification - detection of colonies with DNA intercalating dyes

i) control

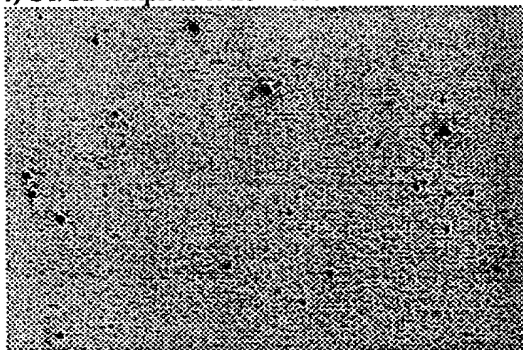


ii) with template

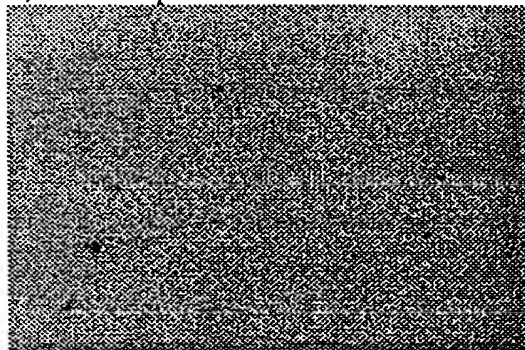
**FIG. 8**

DNA amplification; detection of colonies by specific probe hybridisation

i) S1/S2 template ratio = 1/0



ii) S1/S2 template ratio = 1/10



iii) S1/S2 template ratio = 0/1





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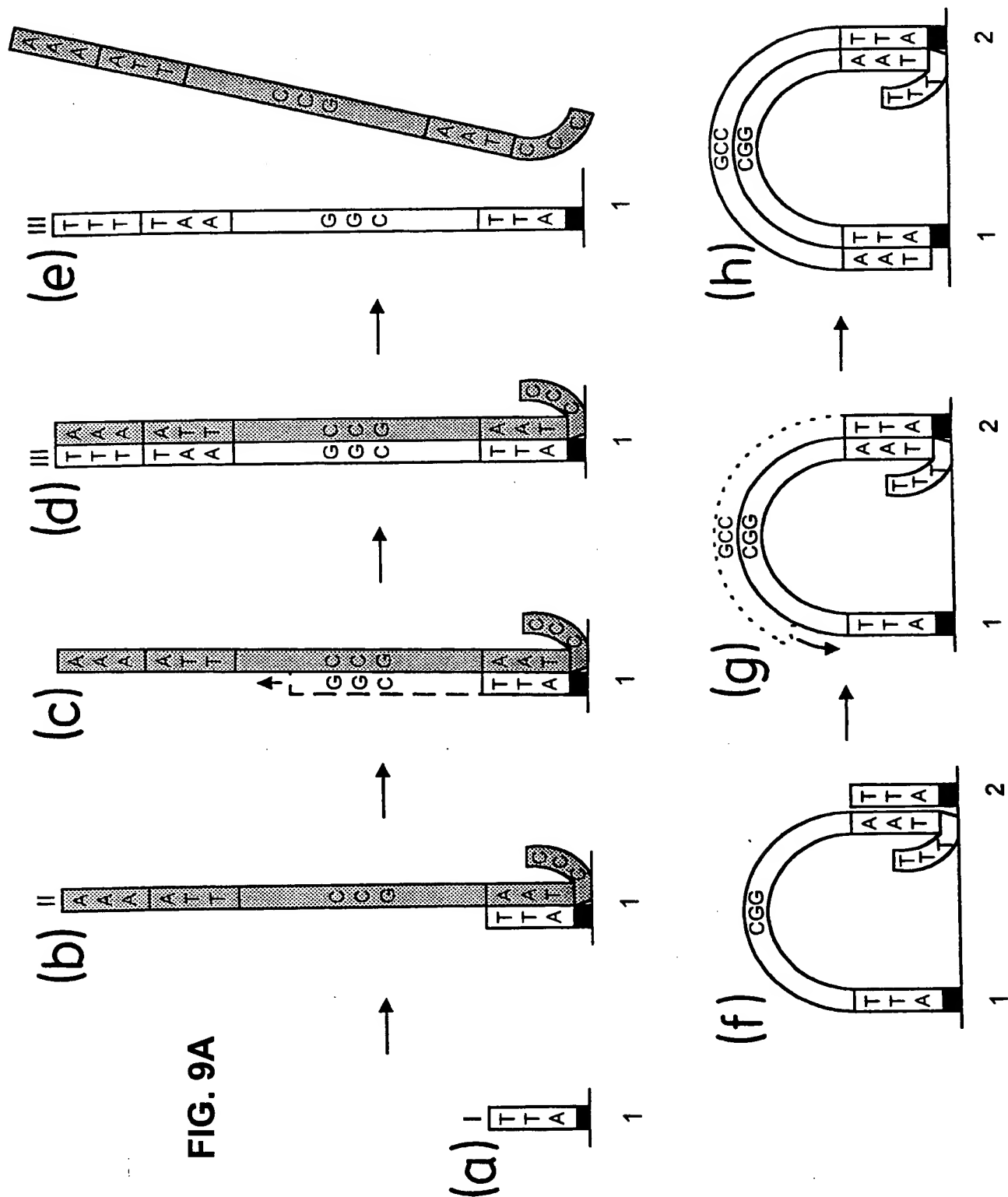
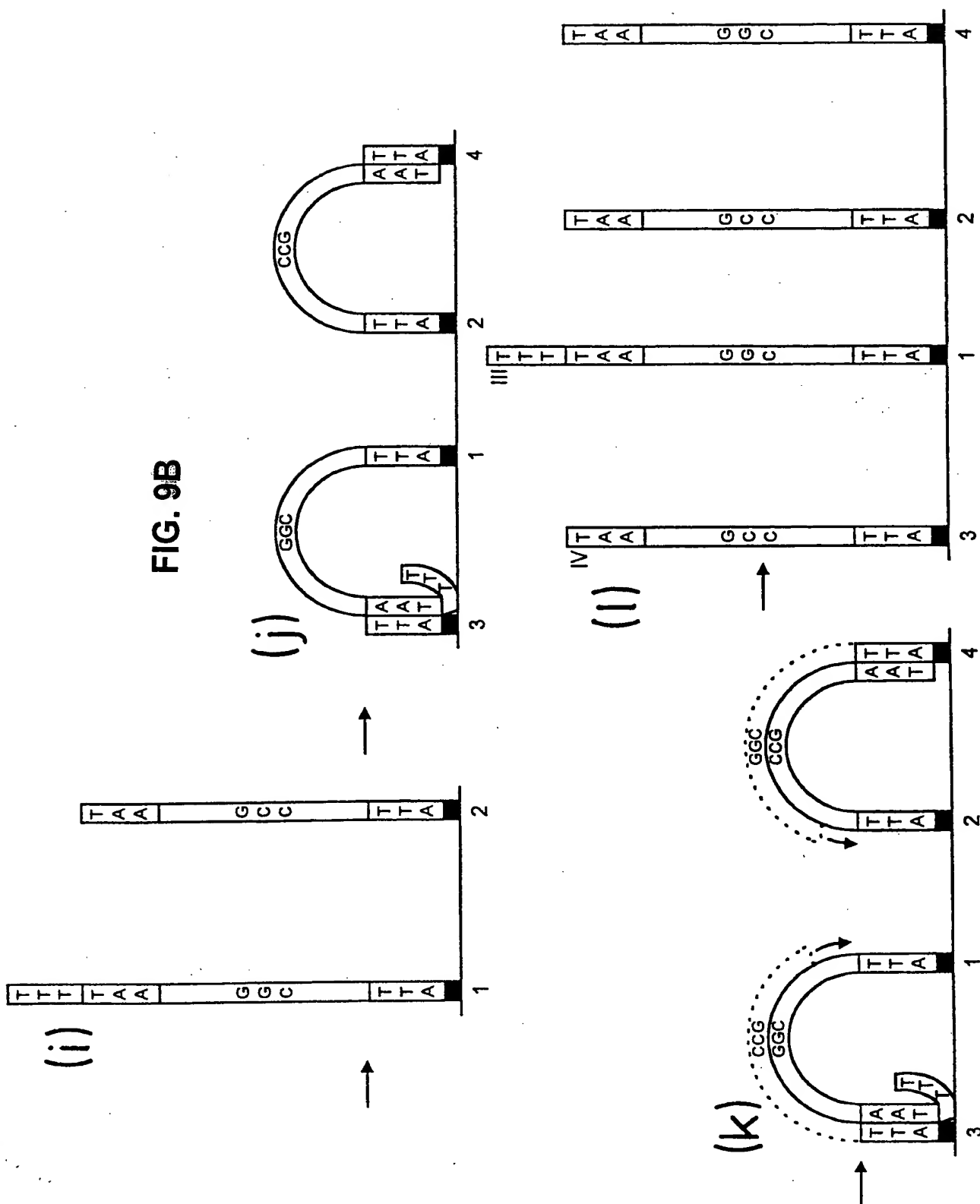


FIG. 9A

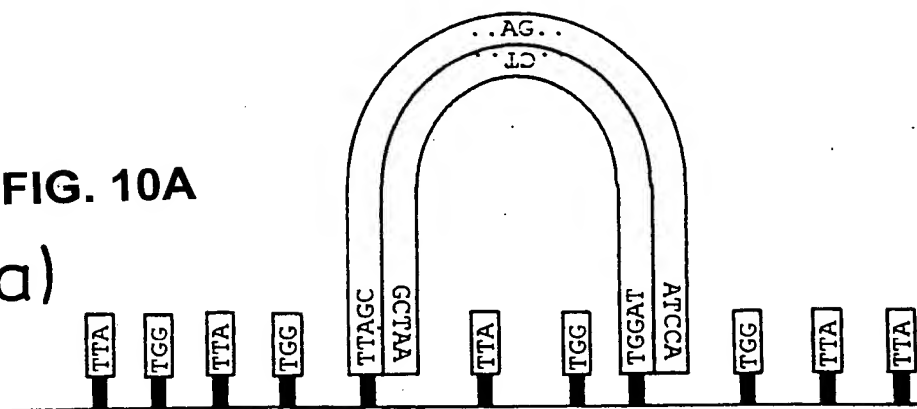
FIG. 9B



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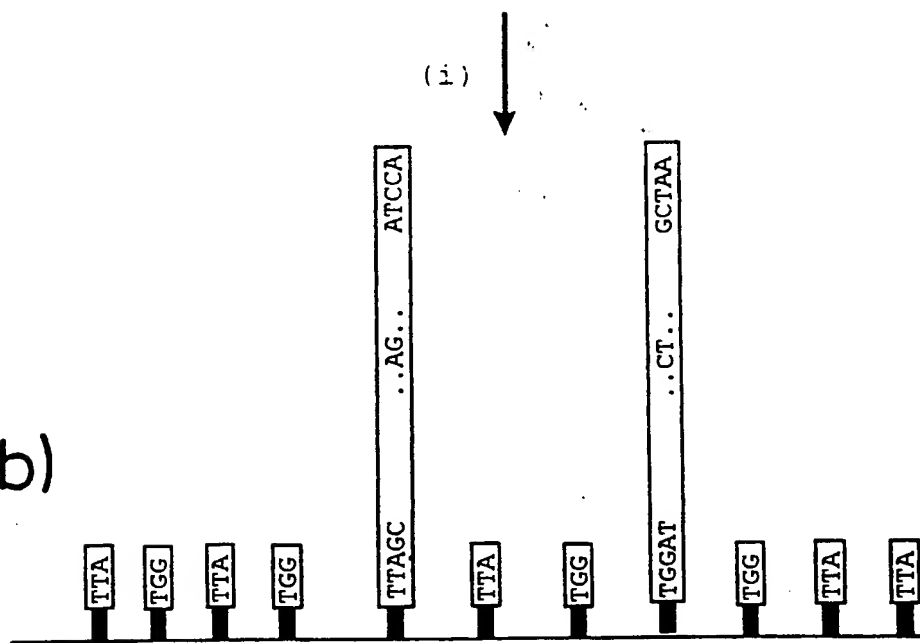
FIG. 10A

(a)



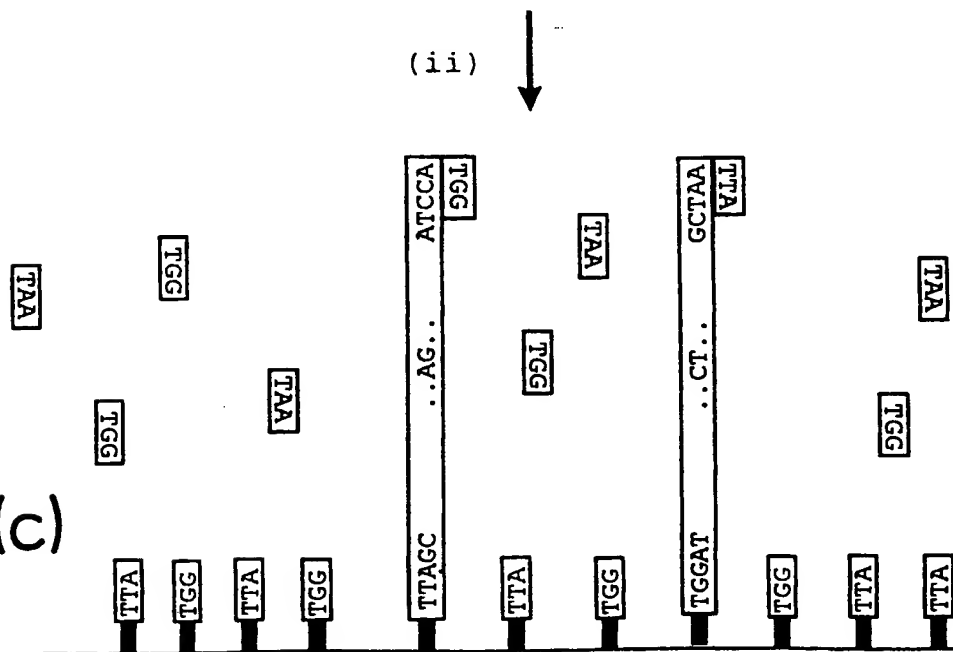
(i)

(b)



(ii)

(c)

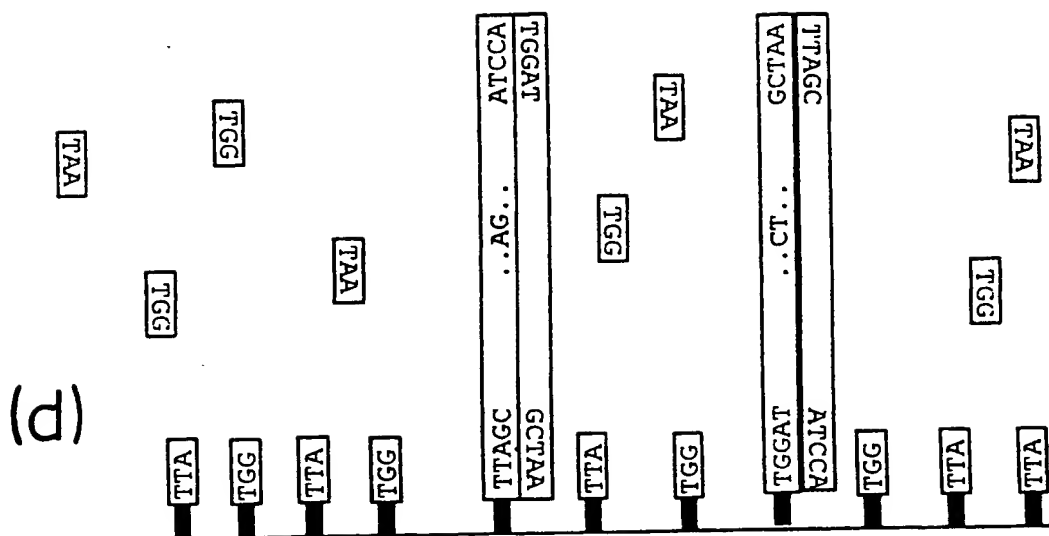


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(iii)



FIG. 10B

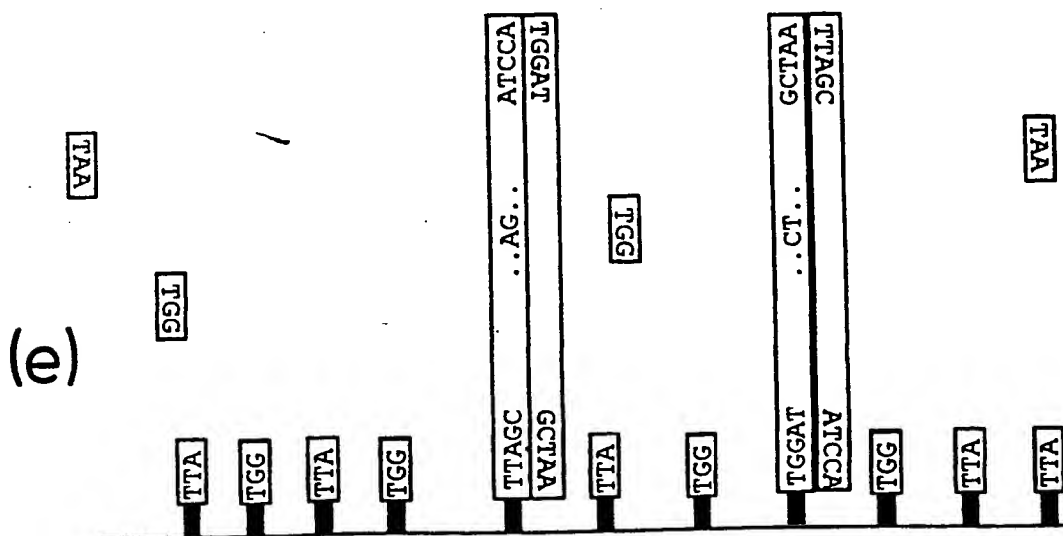


(iv)



TGGAT	..CT..	GCTAA
TTAGC	..AG..	ATCCA

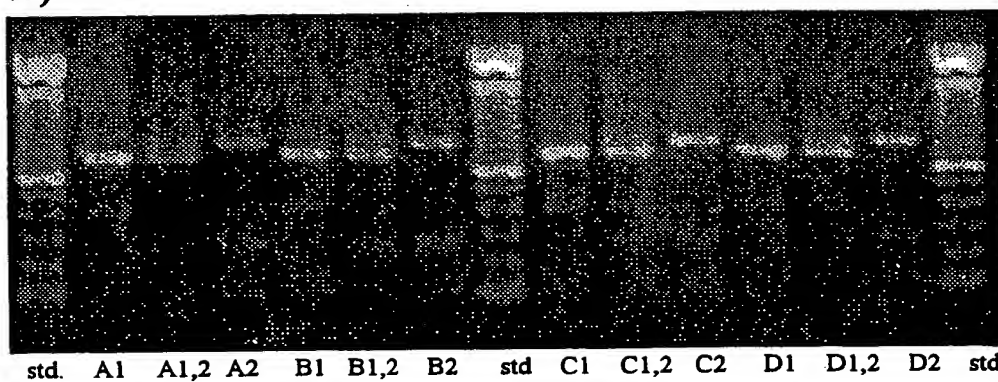
TGGAT	..CT..	GCTAA
TTAGC	..AG..	ATCCA



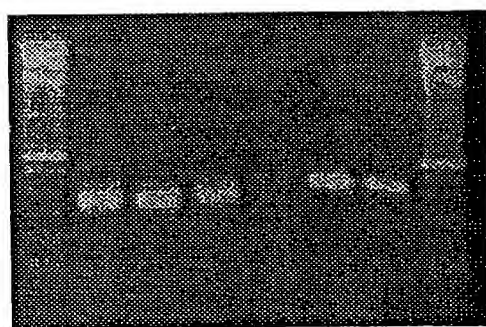
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FIG. 11.

A)



B)

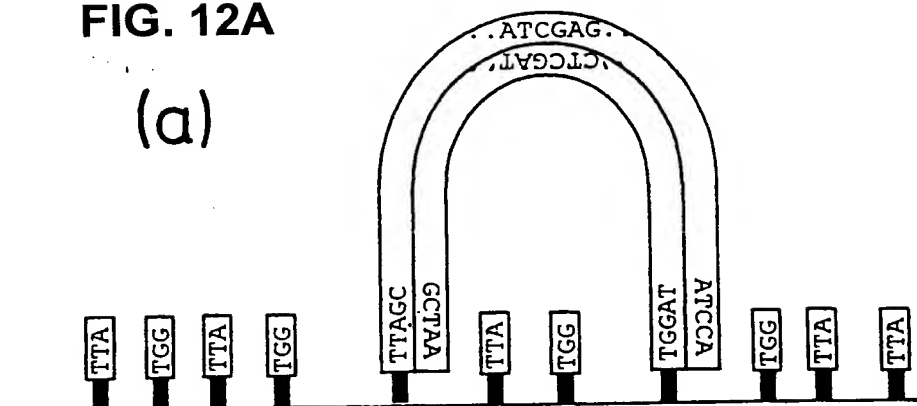


std. E1 E1,2 E2 F1 F1,2 F2 std

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FIG. 12A

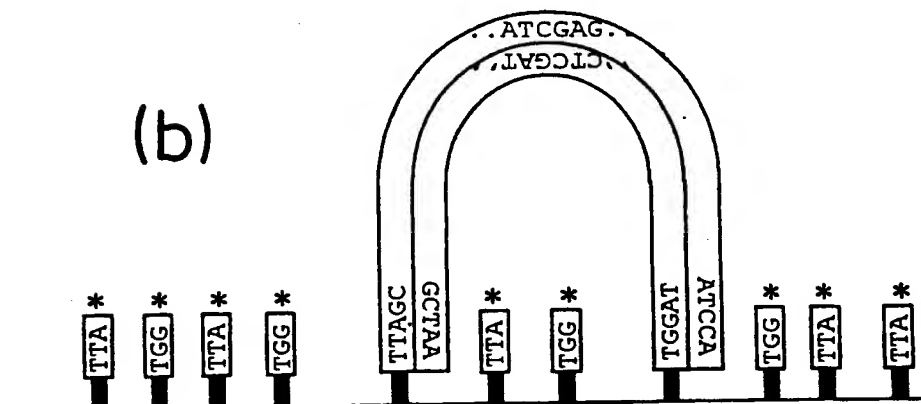
(a)



(i)



(b)



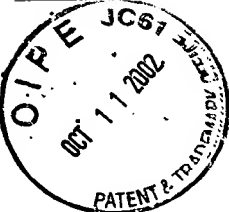
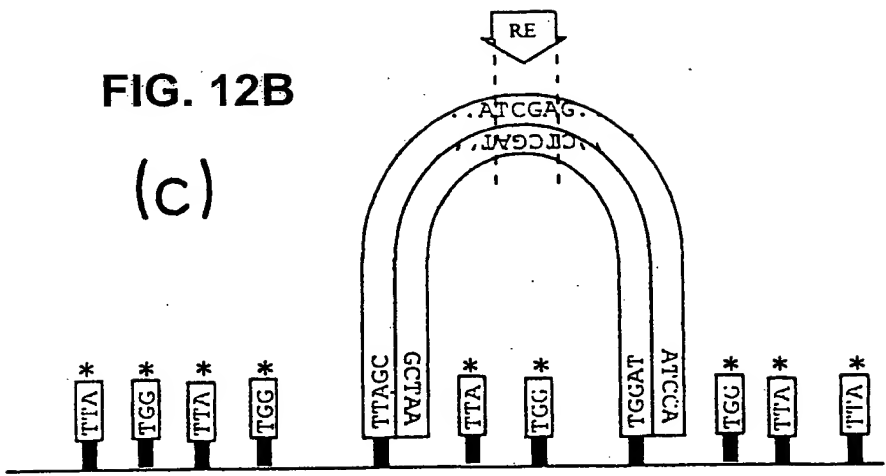


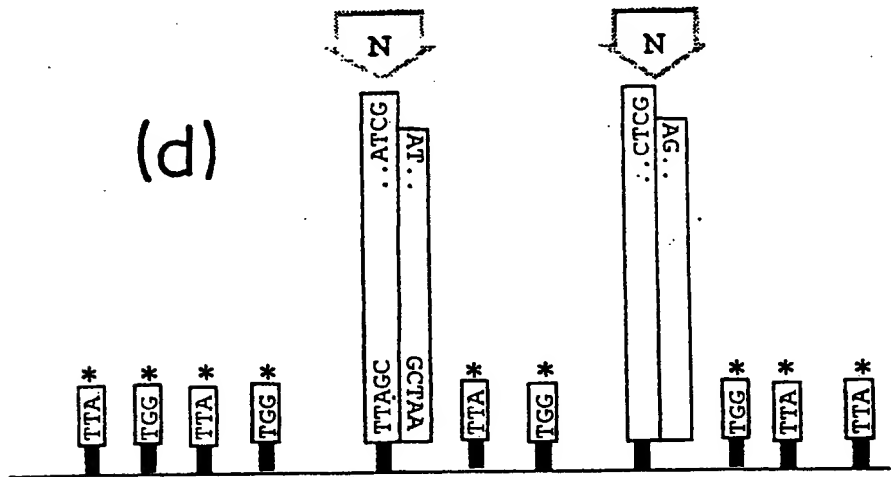
FIG. 12B

(c)



(ii)

(d)



(iii)

(e)

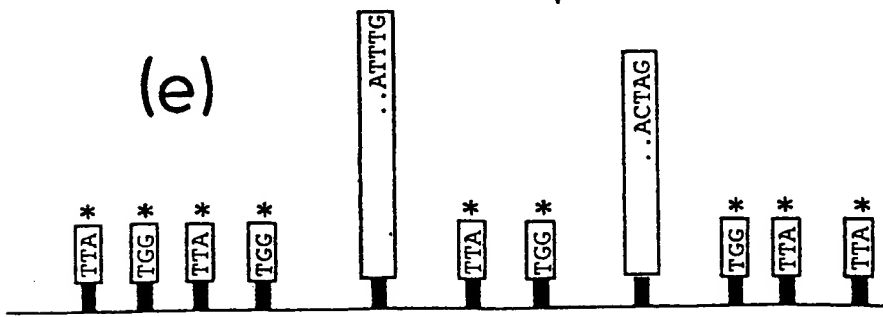
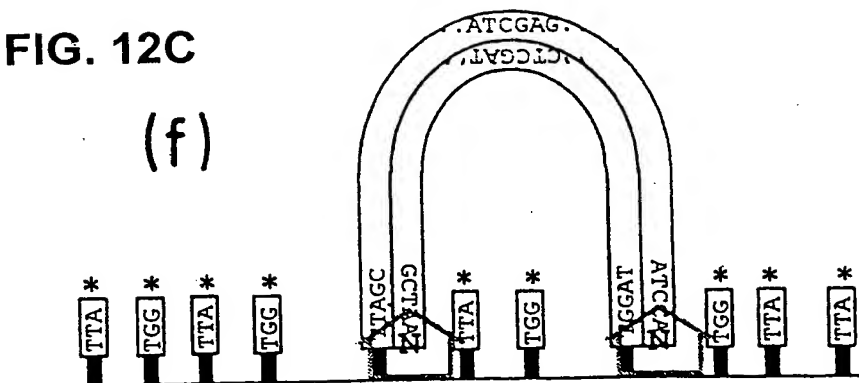


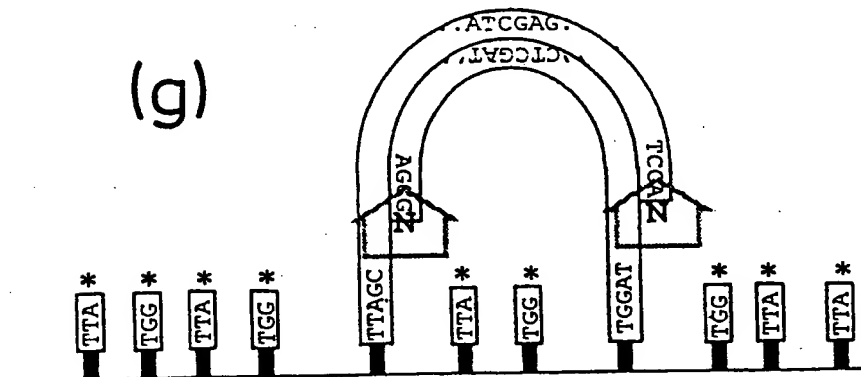
FIG. 12C

(f)



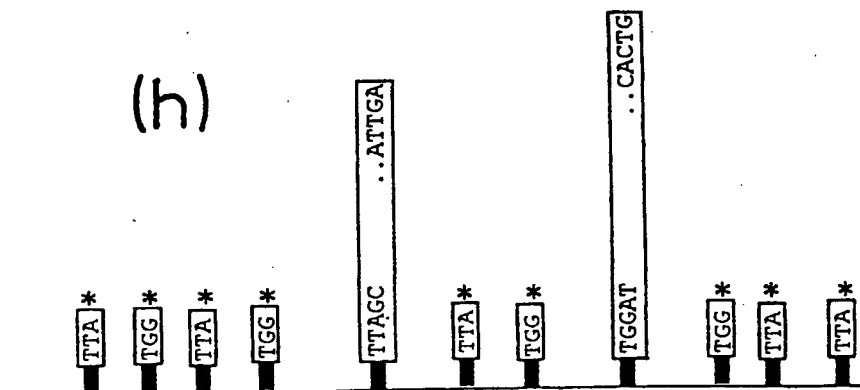
(iv)

(g)



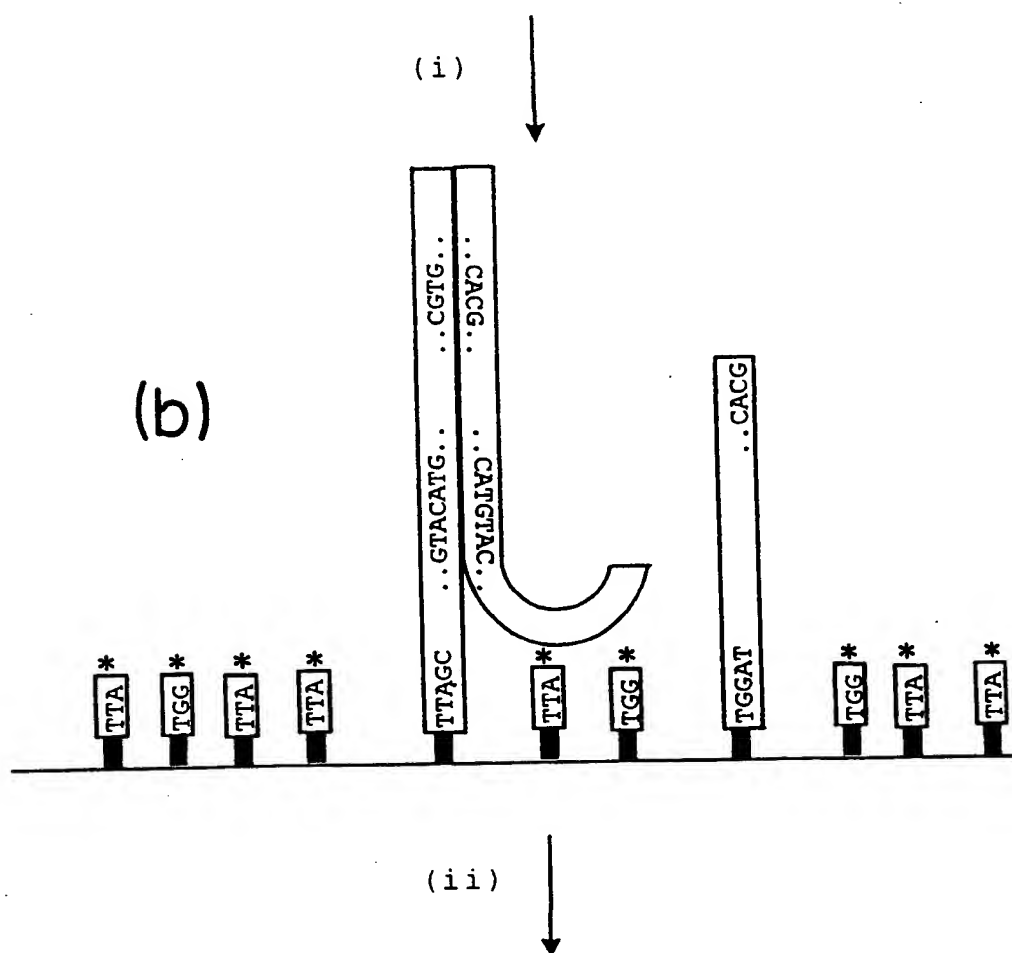
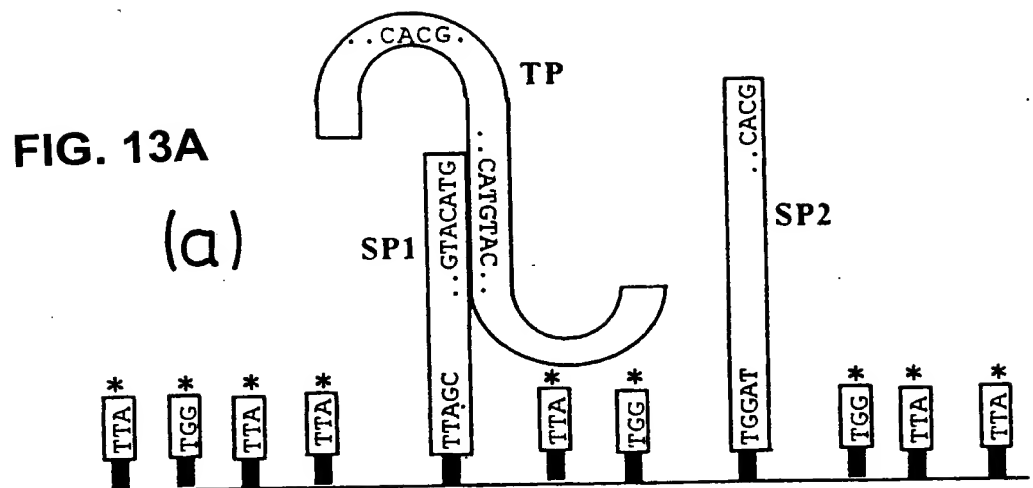
(v)

(h)





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FIG. 13B

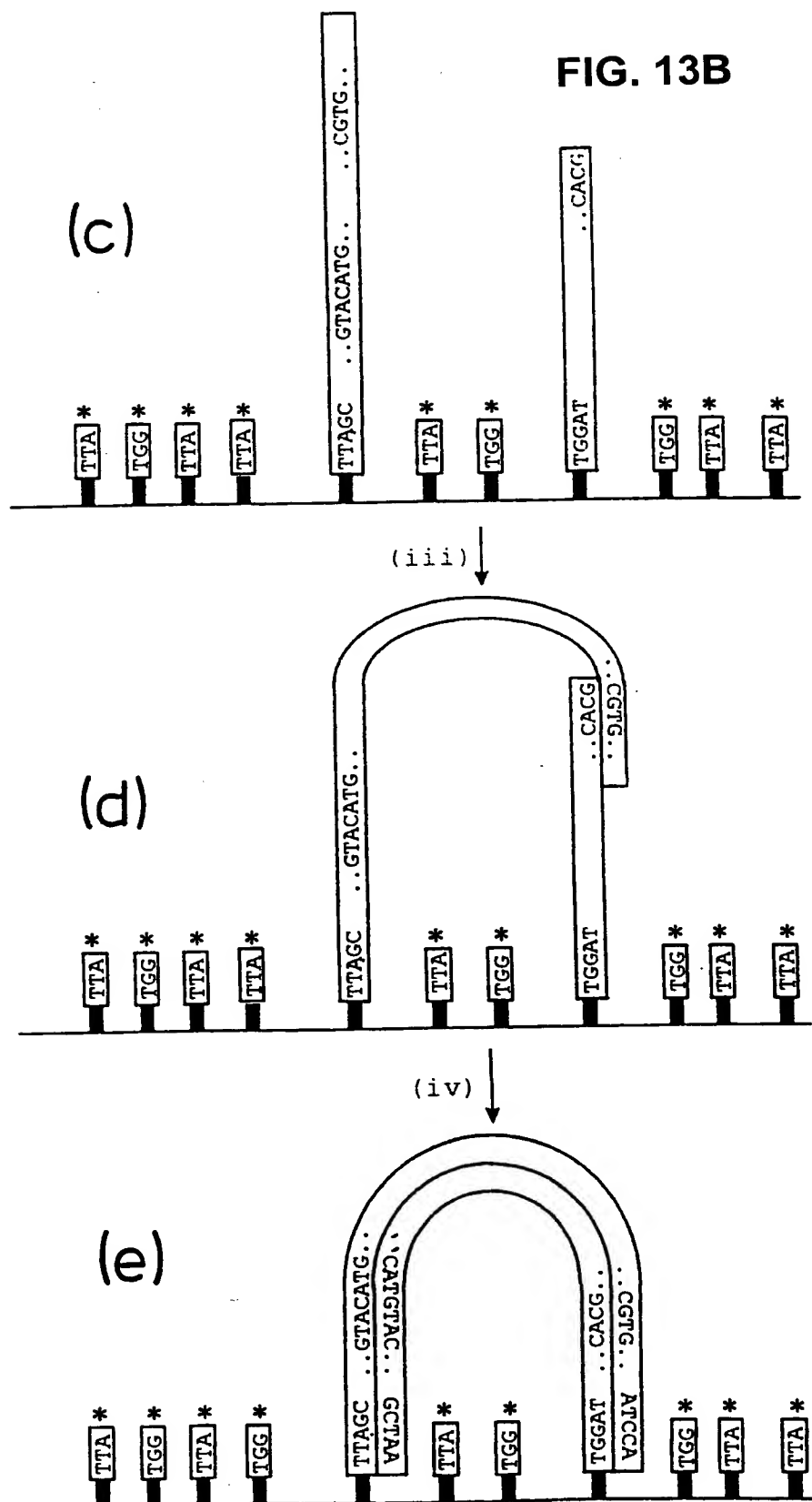
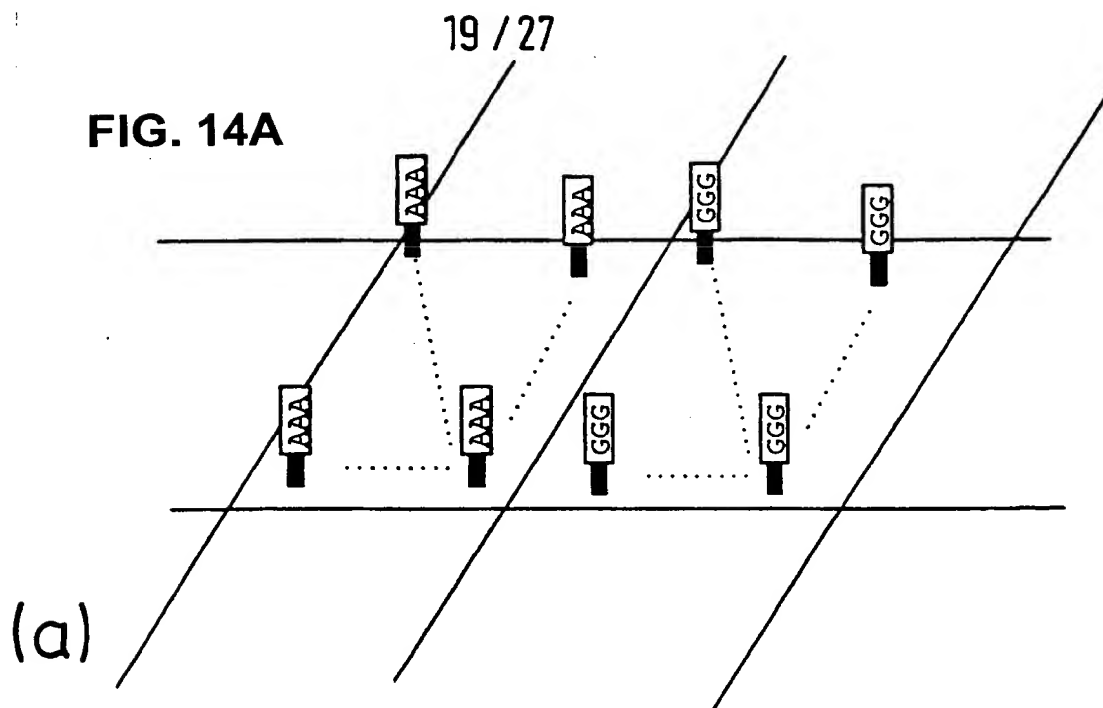
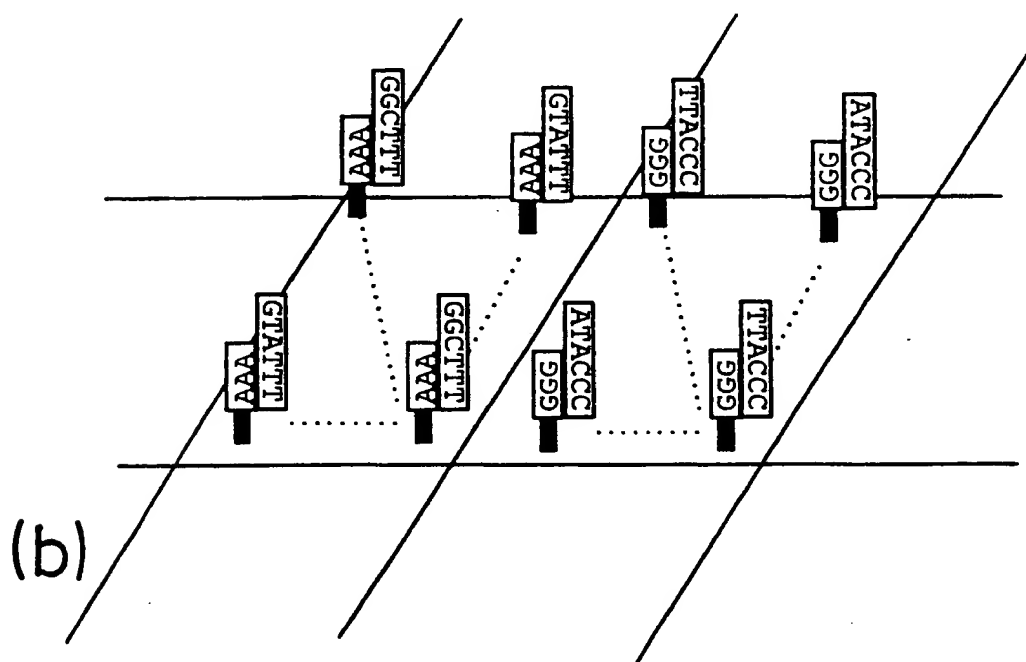


FIG. 14A



(i)



(ii)



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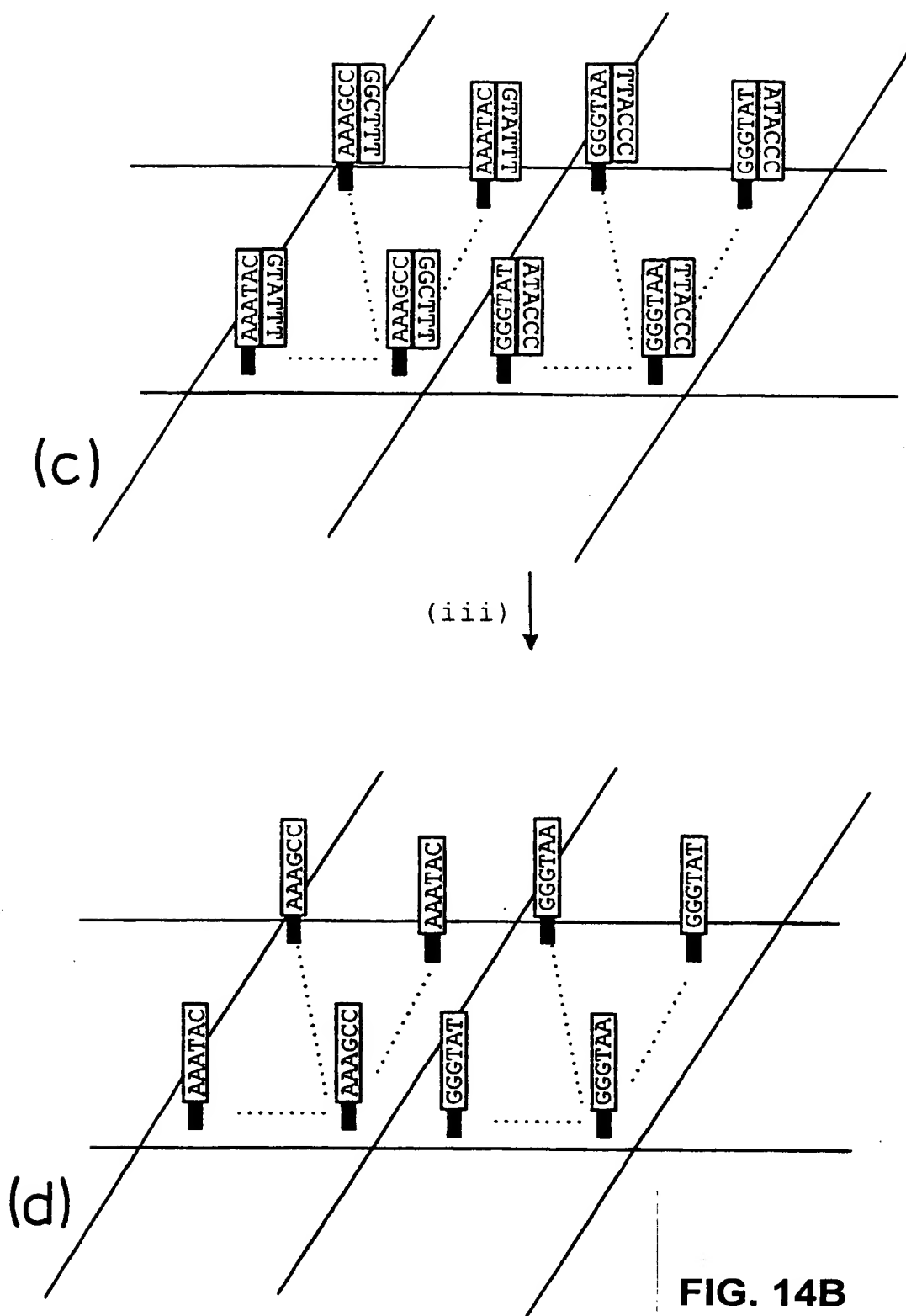


FIG. 14B

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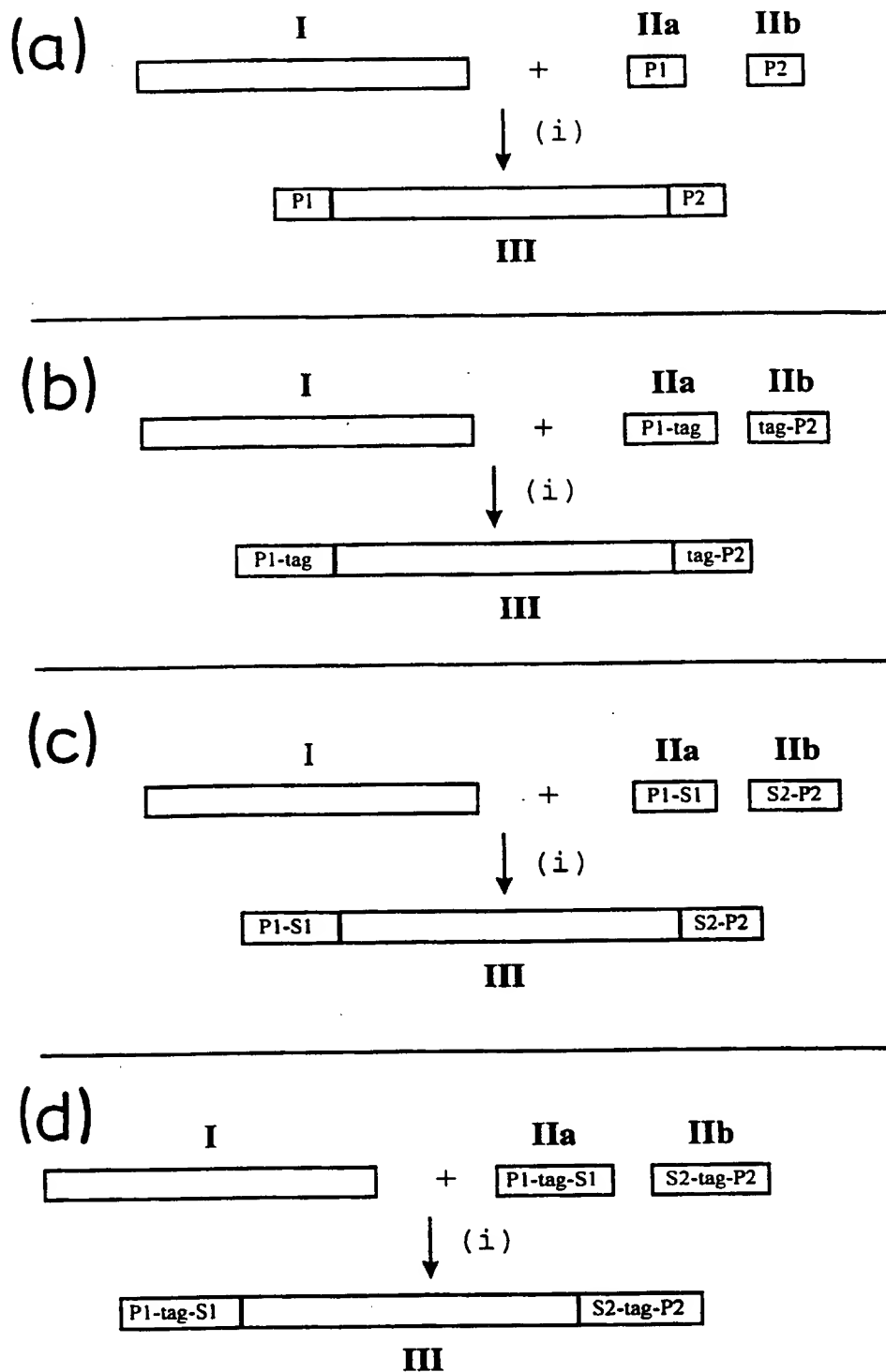


FIG. 15

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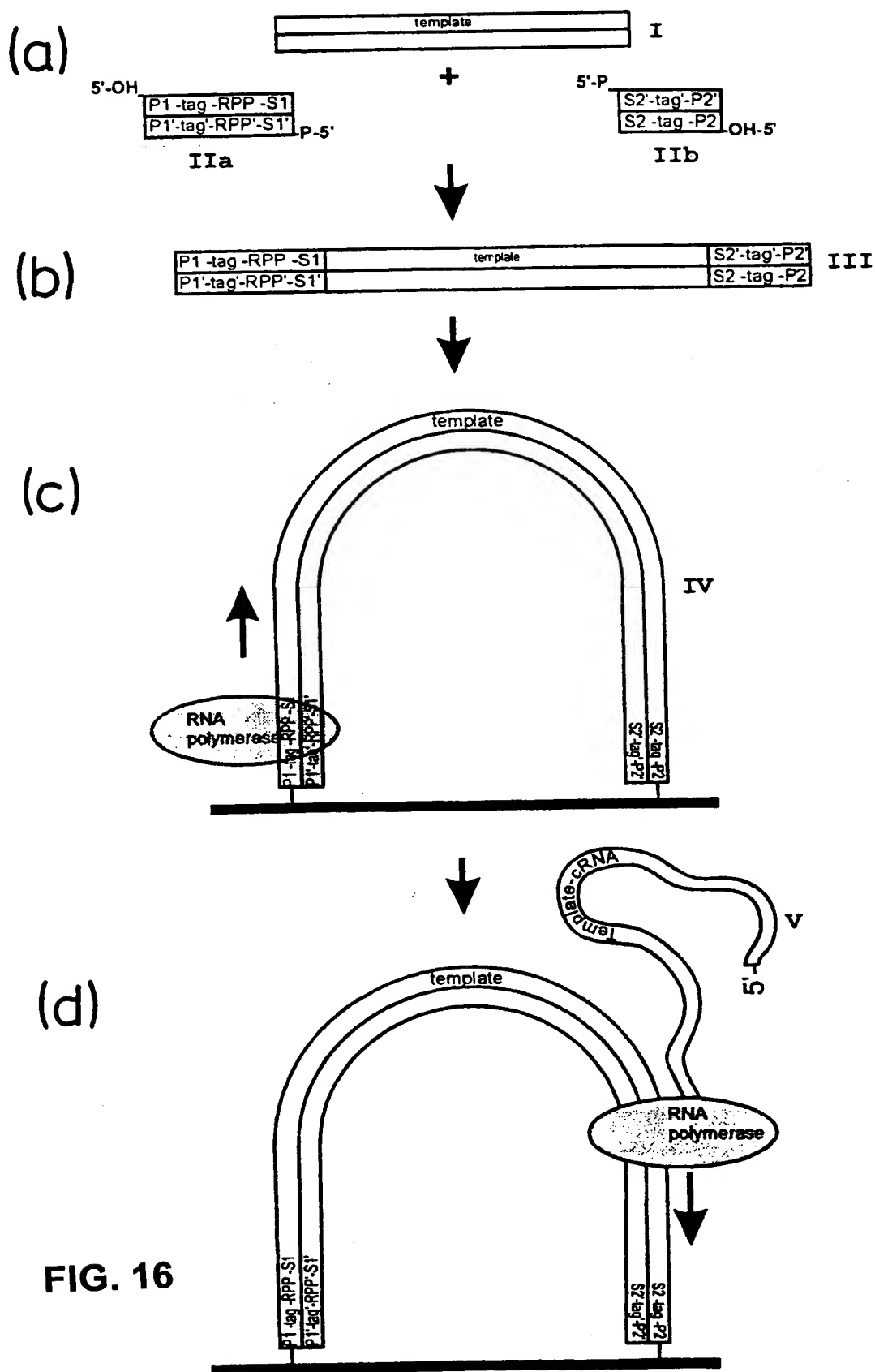
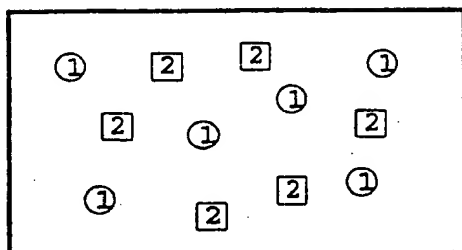


FIG. 16

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**FIG. 17**  
*in situ* Sequencing

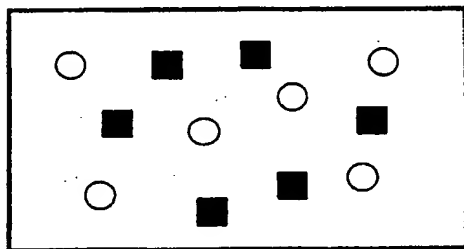
(a)



Two types of  
randomly arrayed  
DNA colonies

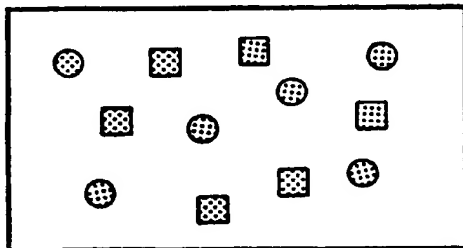
(b)

step 1  
add dGTP



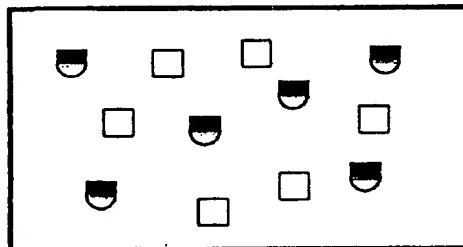
(c)

step 2  
add dATP



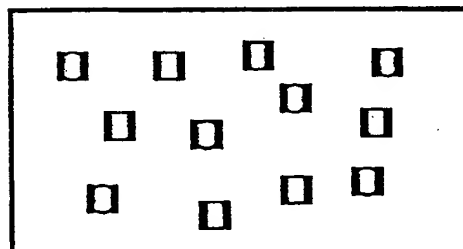
(d)

step 3  
add dTTP



(e)

step 4  
add dCTP



f)

1	2
	G
A	A
T	
C	C

DNA sequence:  
type 1: ATC  
type 2: GAC

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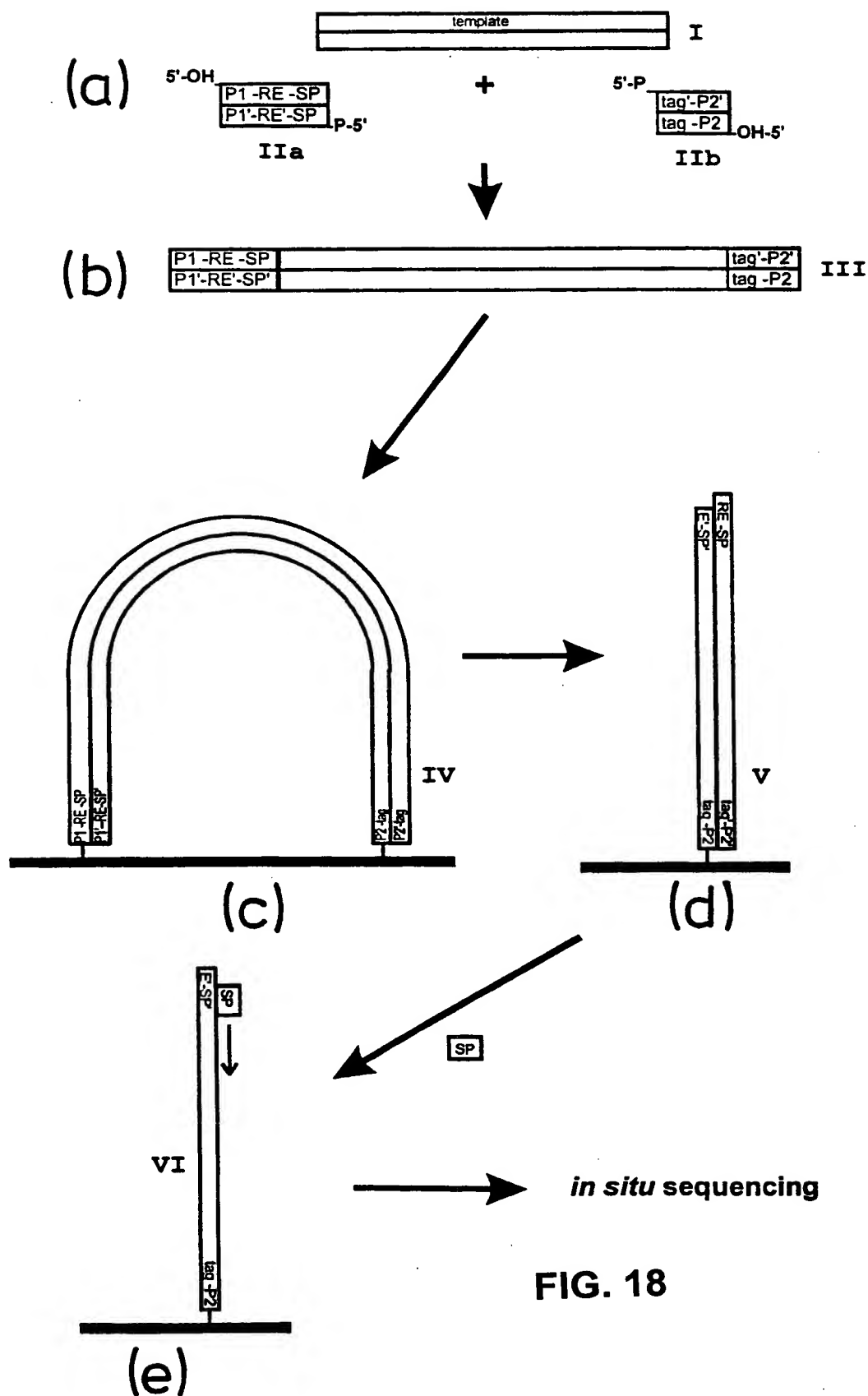


FIG. 18



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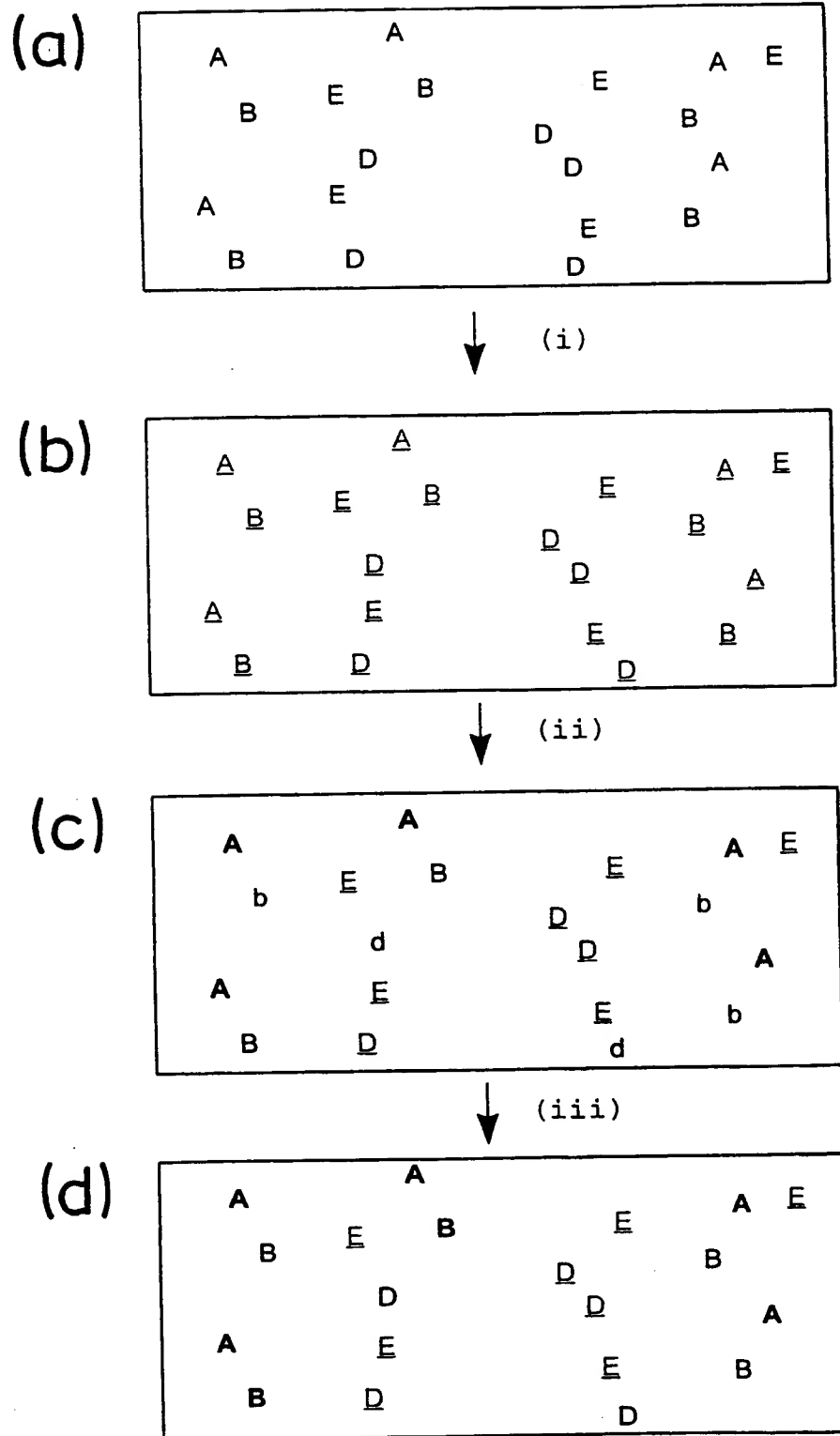


FIG. 19

SUBSTITUTE SHEET (RULE 26)

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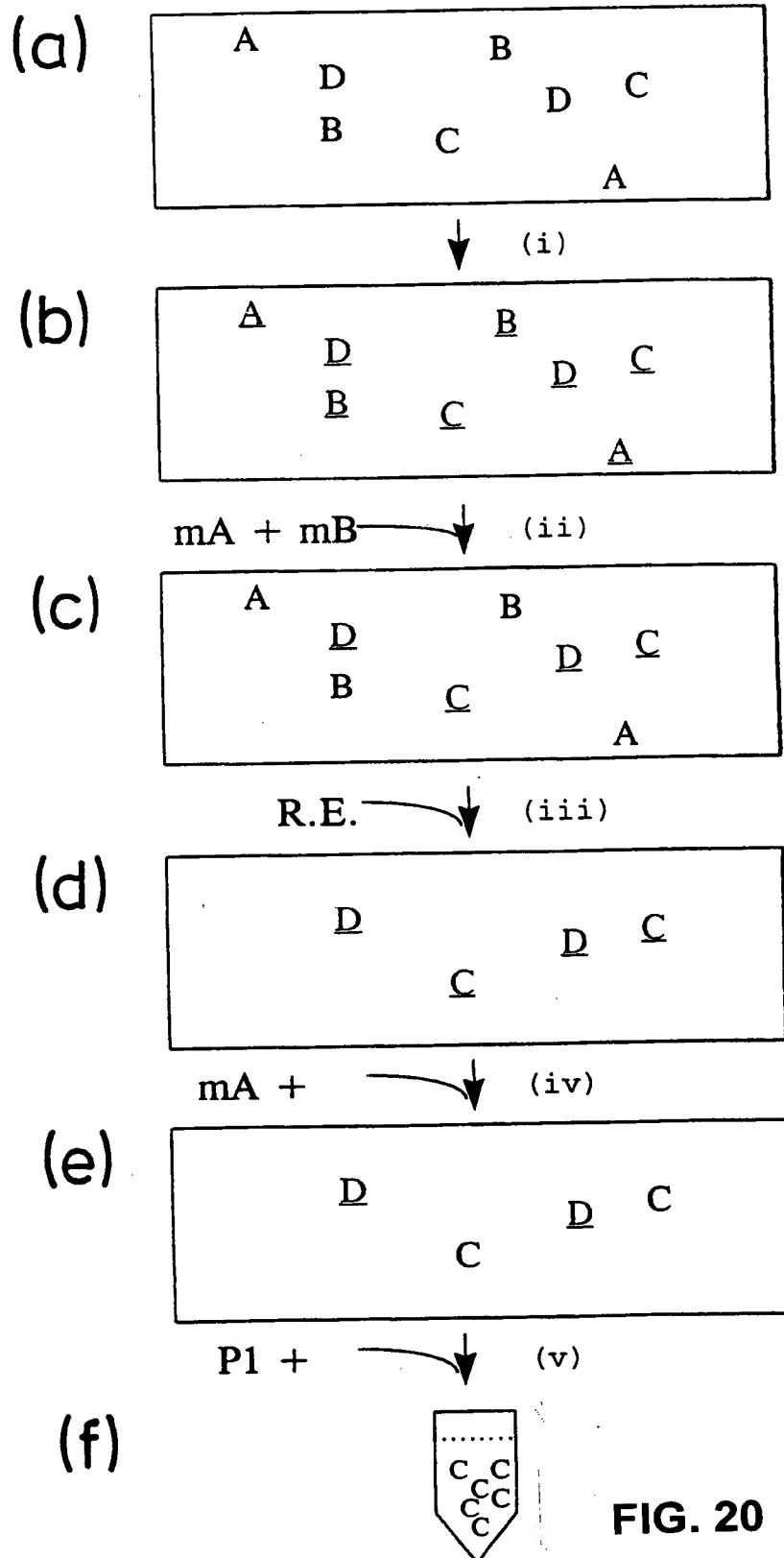


FIG. 20

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